



**FLORENCE COPPER INC.**

1575 W. Hunt Highway, Florence, Arizona 85132 USA

[florencecopper.com](http://florencecopper.com)

February 25, 2022

Mr. David Albright  
Manager, Groundwater Protection Section  
USEPA Region 9 (WTR-4-2)  
75 Hawthorne St  
San Francisco, CA 94105

Subject: Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1  
Monthly Update for AL/AQL Exceedances at Supplemental Monitoring Well M59-O

Dear Mr. Albright:

Florence Copper is providing this monthly update of supplemental monitoring well M59-O alert level (AL) and/or Aquifer Quality Limit (AQL) exceedances under Underground Injection Control (UIC) Permit Number R9UIC-AZ3FY11-1 (Permit).

Florence Copper has been voluntarily monitoring M59-O monthly for the parameters listed in Table 1 (see attached), and previously submitted a monthly report on January 24, 2022. Table 1 has been updated to include the most recent laboratory results from the monthly sample collected on January 12, 2022 and received on February 3, 2022. As shown in Figure 1, the trend for the reported parameters is downward from peak levels in June/July 2021. The February monthly sample was collected on February 7, 2022 and the results are pending.

Redevelopment of injection, recovery, and observation wells in the wellfield continued during February. Beginning in December and continuing to present, flows at recovery well R-09 and all injection wells were reversed as part of the ongoing rinsing activities. Recovery flows at wells I-01 and I-02 were increased to assist with rinsing on the north and east side of the wellfield. In addition, observation wells O-02 and O-03 are being pumped at levels which maintain hydraulic control to expedite rinsing at M59-O.

Hydraulic gradients were maintained throughout the month.

Florence Copper will continue monthly sampling of supplemental monitoring well M59-O for parameters which exceeded the ALs and AQLs and will report these results monthly to EPA until all concentrations are below the ALs and AQLs.

Please feel free to contact me should you have any questions or comments.

Sincerely,  
**Florence Copper, Inc.**



Brent Berg  
General Manager

Cc: Nancy Rumrill, EPA Region 9  
Daniel Reeder, ADEQ

Table 1. Supplemental Monitoring Well M59-O Monthly Sampling Results

M59-O	Parameter						
	Magnesium (mg/L)	Sulfate (mg/L)	Total dissolved solids (TDS) (mg/L)	Total Uranium (mg/L)	Adjusted gross alpha (pCi/L)	Radium 226+228 (pCi/L)	Gross beta (pCi/L)
AL	23	202	854	0.0052	15.8	6.9	16
AQL	--	--	--	--	15.8	6.9	16
12/28/2020	57.2	865	1,860	0.037	73.5 ± 3.7	19.8 ± 0.8	43.2±2.7
1/18/2021	63.1	960	1800	0.038	35.4 ± 2.5	22.0 ± 0.8	52.7±3.0
2/22/2021	26.5	383	970	0.0088	17.9±1.4	6.2±0.5	NA
3/23/2021	19.1	228	762	0.003	18.8±1.5	7.0±0.6	NA
4/14/2021	19.8	249	780	0.0038	18.1±1.2	10.9±0.7	19.6±1.9
5/19/2021	65.6	999	2010	0.0096	49.1±2.1	18.0±0.8	52.1 ± 3.3
6/1/2021	59.8	850	1900	0.0117	57.3±2.9	13.6±0.7	36.9±2.9
7/19/2021	70	1200	2300	0.0187	29.4±3.2	15.4±0.7	41.6±3.2
8/24/2021	59	1100	2100	0.0326	31.3±3.7	13.7±0.6	36.8±3.1
9/20/2021	59	990	2000	0.024	24.4±3.4	10.3±0.6	38.6±3.1
10/19/2021	55	820	1800	0.043	28.0±2.0	10.9±0.6	33.2±2.7
11/9/2021	65	670	1500	0.0096	27.9±2.3	11.9±0.6	28.0±2.4
12/13/2021	43	720	1600	0.011	39.5±2.5	12.3±0.6	34.3±2.5
1/13/2022	40	660	1400	0.0098	26.7±2.1	8.8±0.4	25.4±2.3

BOLD values are exceedances of AL and/or AQL

NA: not analyzed

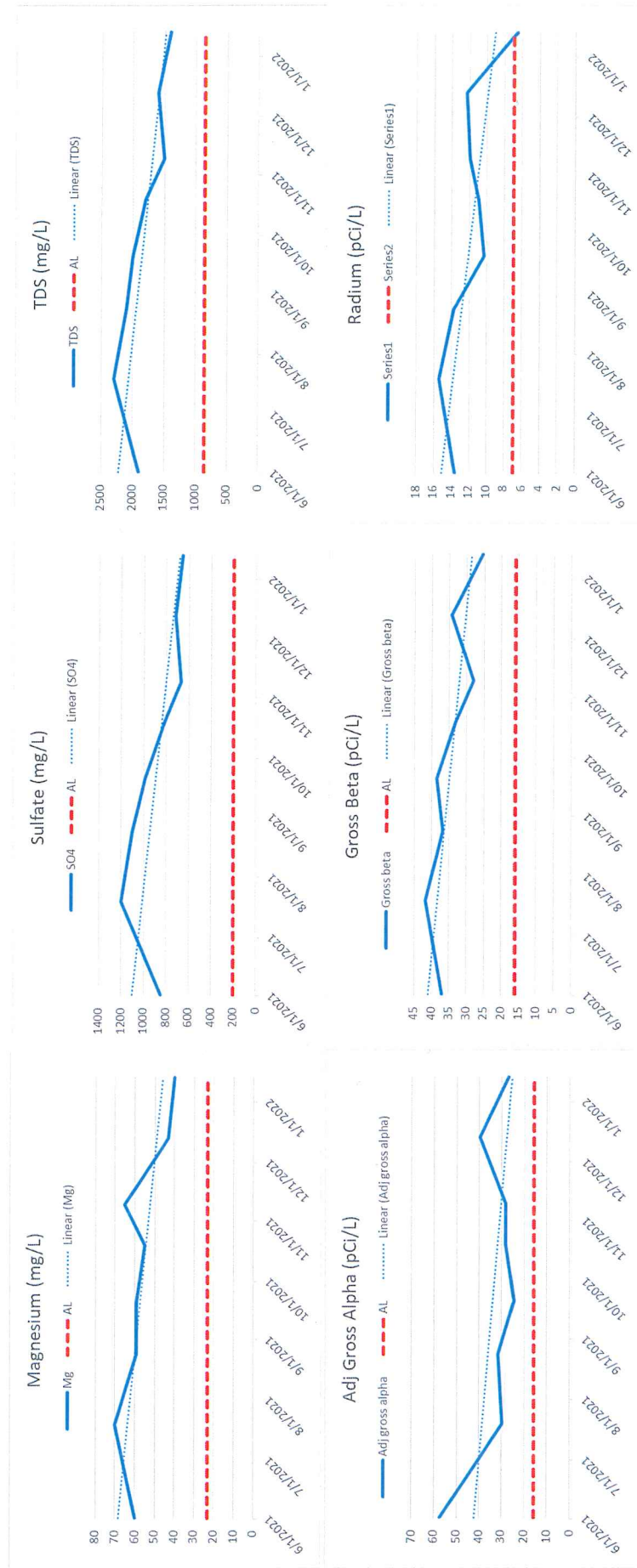


Figure 1. Supplemental Monitoring Well M59-O concentration trends since June 2021